

Optical properties / Moisture barrier

Cycloolefin Copolymer (COC)

APEL™

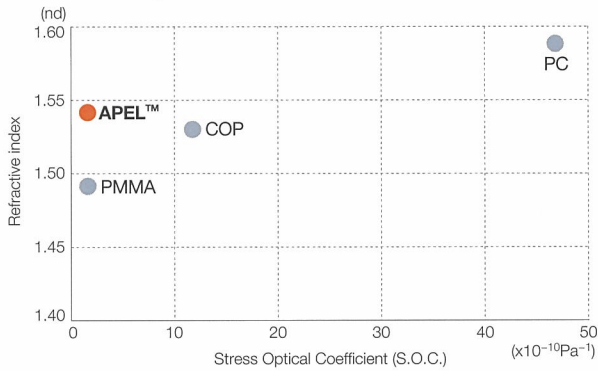
APEL™ is an ideal transparent material for lens applications because of its outstanding optical properties. It is also used widely for medical and functional packaging use.

Characteristics

Optical properties

APEL™ Cycloolefin Copolymer's light transmittance of 91%, and low birefringence make it ideal for use in the development of opto-electric applications.

Performance comparison resins for optical applications



APEL™ has excellent optical characteristics. (High refractive index, Low birefringence)

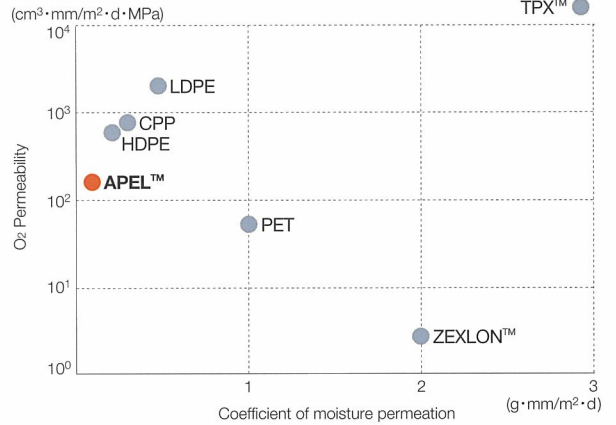
Chemical resistance

In addition to excellent moisture impermeability, the Cycloolefin Copolymer displays an ability to resist acid, alkalis and alcohol among others.

Moisture barrier

APEL™ can be used to develop moisture barrier containers and for film applications due to its low permeability to water vapor and excellent humidity resistance.

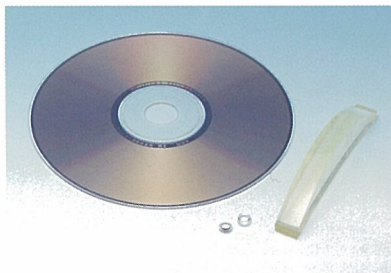
Gas barrier/permeability properties



Dimensional stability

APEL™ exhibits excellent dimensional stability, with low mold shrinkage and low coefficient of linear expansion.

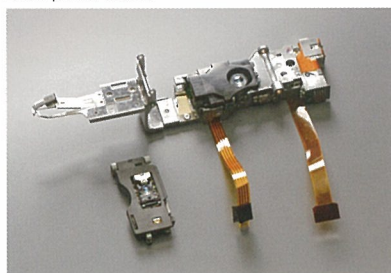
Applications



Pick-up lenses for CD & DVD players
Laser printer lenses



Mobile phone camera lenses



DVD lens unit



Press through packaging (PTP)